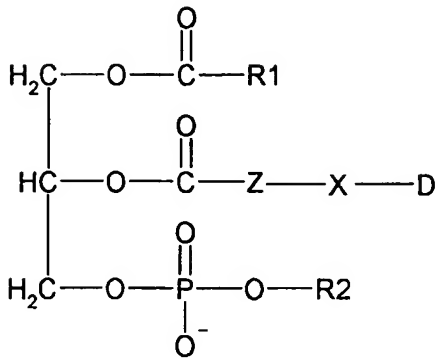
CLAIMS:

1. A compound of the general formula I



Formula I

or a pharmaceutically acceptable salt thereof, wherein:

R1 is a saturated or unsaturated, substituted or unsubstituted hydrocarbon chain having from 2 to 30 carbon atoms;

R2 is H or a phospholipid head group;

D is the residue of a nonsteroidal anti-inflammatory drug having a functional group selected from the group consisting of carboxyl, hydroxyl, amine and thiol, wherein D is attached through said functional group to a bridging group, -C(O)-Z-X- , wherein Z is a saturated or unsaturated hydrocarbon chain having from 2 to 15 carbon atoms, and X is selected from amino, hydroxy, thio and carbonyl groups, such that when the functional group of D is carboxyl, X is selected from amino, hydroxy and thio, and when the functional group of D is amino, hydroxy or thio, X is a carbonyl group.

2. The compound according to claim 1, wherein the drug derivative is inactive.

3. The compound according to claim 1, wherein an ester bond at position sn-2 of the phospholipid of the general formula I is cleaveable by a lipase.

4. The compound according to claim 3, wherein said lipase is a phospholipase.

5. The compound according to claim 4, wherein said phospholipase is phospholipase A_2 (PLA_2).

6. The compound according to claim 1, wherein R1 is an hydrocarbon chain having from 10 to 20 carbon atoms.

7. The compound according to claim 1, wherein R1 is an hydrocarbon chain having 15 or 17 carbon atoms.

8. The compound according to claim 1, wherein D is selected from the group consisting of diclofenac, indomethacin, ibuprofen, naproxen and 6-methoxy-2-naphthylacetic acid.

9. The compound according to claim 1, wherein R2 is selected from the group consisting of choline, ethanolamine, inositol and serine.

10. The compound according to claim 1 selected from the group consisting of:

1-Stearoyl-2-{3-[2'-(2",6"-dichloroanilino)phenylacetamido]propanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{4-[2'-(2",6"-dichloroanilino)phenylacetamido]butanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{5-[2'-(2",6"-dichloroanilino)phenylacetamido]valeroyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{6-[2'-(2",6"-dichloroanilino)phenylacetamido]hexanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{8-[2'-(2",6"-dichloroanilino)phenylacetamido]octanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{12-[2'-(2",6"-dichloroanilino)phenylacetamido]dodecanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{3-[1-(p-chlorobenzoyl)-5-methoxy-2-methyl indolylacetamido]propanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{4-[1-(p-chlorobenzoyl)-5-methoxy-2-methyl indolylacetamido]butanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{5-[1-(p-chlorobenzoyl)-5-methoxy-2-methyl indolylacetamido]valeroyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{6-[1-(p-chlorobenzoyl)-5-methoxy-2-methyl indolylacetamido]hexanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{8-[1-(p-chlorobenzoyl)-5-methoxy-2-methyl indolylacetamido]octanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{3-[α-methyl-4-(2-methylpropyl)benzeneacetamido] propanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{6-[α-methyl-4-(2-methylpropyl)benzeneacetamido] hexanoyl}-sn-glycero-3-phosphatidylcholine,

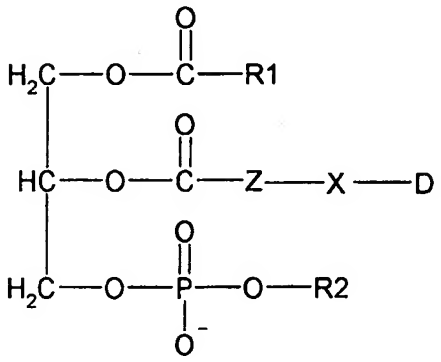
1-Stearoyl-2-{3-[(S)-6-methoxy-α-methyl-2-naphtaleneacetamido] propanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{4-[(S)-6-methoxy-α-methyl-2-naphtaleneacetamido] butanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{6-[(S)-6-methoxy-α-methyl-2-naphtaleneacetamido] hexanoyl}-sn-glycero-3-phosphatidylcholine, and

1-Stearoyl-2-{4-[2-(6-methoxynaphtyl)acetamido]butanoyl}-sn-glycero-3-phosphatidylcholine.

11. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and, as an active ingredient, a compound of the general formula I



Formula I

or a pharmaceutically acceptable salt thereof, wherein:

R1 is a saturated or unsaturated, substituted or unsubstituted hydrocarbon chain having from 2 to 30 carbon atoms;

R2 is H or a phospholipid head group;

D is the residue of a nonsteroidal anti-inflammatory drug having a functional group selected from the group consisting of carboxyl, hydroxyl, amine and thiol, wherein D is attached through said functional group to a bridging group, -C(O)-Z-X- , wherein Z is a saturated or unsaturated hydrocarbon chain having from 3 to 15 carbon atoms, and X is selected from amino, hydroxy, thio and carbonyl groups, such that when the functional group of D is carboxyl, X is selected from amino, hydroxy and thio, and when the functional group of D is amino, hydroxy or thio, X is a carbonyl group.

12. The pharmaceutical composition according to claim 11, wherein -C(O)-Z-X-D is an inactive drug derivative.

13. The pharmaceutical composition according to claim 11, wherein an ester bond at position sn-2 of the phospholipid of the general formula I is cleaveable by a lipase.

14. The pharmaceutical composition according to claim 13, wherein said lipase is a phospholipase.

15. The pharmaceutical composition according to claim 14, wherein said phospholipase is phospholipase A_2 (PLA_2).

16. The pharmaceutical composition according to claim 11, wherein R1 is an hydrocarbon chain having from 10 to 20 carbon atoms.

17. The pharmaceutical composition according to claim 11, wherein R1 is an hydrocarbon chain having 15 or 17 carbon atoms.

18. The pharmaceutical composition according to claim 11, wherein D is selected from the group consisting of diclofenac, indomethacin, ibuprofen, naproxen and 6-methoxy-2-naphthylacetic acid.

19. The pharmaceutical composition according to claim 11, wherein R2 is selected from the group consisting of choline, ethanolamine, inositol and serine.

20. The pharmaceutical composition according to claim 11, wherein said compound of the general formula I is selected from the group consisting of:

1-Stearoyl-2-{3-[2'-(2",6"-dichloroanilino)phenylacetamido]propanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{4-[2'-(2",6"-dichloroanilino)phenylacetamido]butanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{5-[2'-(2",6"-dichloroanilino)phenylacetamido]valeroyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{6-[2'-(2",6"-dichloroanilino)phenylacetamido]hexanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{8-[2'-(2",6"-dichloroanilino)phenylacetamido]octanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{12-[2'-(2",6"-dichloroanilino)phenylacetamido]dodecanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{3-[1-(p-chlorobenzoyl)-5-methoxy-2-methyl indolylacetamido]propanoyl}-sn-glycero-3-phosphatidylcholine,

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1-Stearoyl-2-{8-[1-(p-chlorobenzoyl)-5-methoxy-2-methyl indolylacetamido]octanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{3-[α-methyl-4-(2-methylpropyl)benzeneacetamido] propanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{6-[α-methyl-4-(2-methylpropyl)benzeneacetamido] hexanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{3-[(S)-6-methoxy-α-methyl-2-naphtaleneacetamido] propanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{4-[(S)-6-methoxy-α-methyl-2-naphtaleneacetamido] butanoyl}-sn-glycero-3-phosphatidylcholine,

1-Stearoyl-2-{6-[(S)-6-methoxy-α-methyl-2-naphtaleneacetamido] hexanoyl}-sn-glycero-3-phosphatidylcholine, and

1-Stearoyl-2-{4-[2-(6-methoxynaphtyl)acetamido]butanoyl}-sn-glycero-3-phosphatidylcholine.

21. The pharmaceutical composition according to any one of claims 11 to 20, in the form of solutions, suspensions, capsules, tablets, aerosols, gels, ointments or suppositories.

22. The pharmaceutical composition according to any one of claims 11 to 20 for oral, ocular, nasal, parenteral, topical or rectal administration.

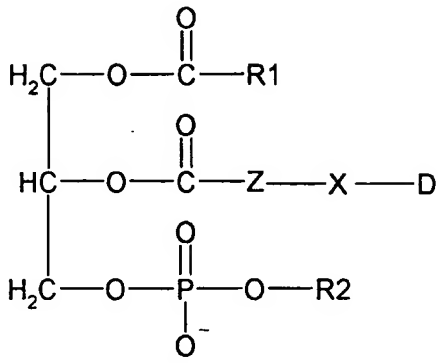
23. The pharmaceutical composition according to claim 22 for oral administration.

24. The pharmaceutical composition according to claim 22 for nasal administration.

25. The pharmaceutical composition according to any one of claims 11 to 24 for the treatment of a disease or disorder related to an inflammatory condition.

26. The pharmaceutical composition according to claim 25, wherein said disease or disorder related to an inflammatory condition is selected from the group consisting of arthritis, rheumatoid arthritis, asthma, psoriasis, systemic lupus erythematosus, inflammatory bowel syndrome and the neurological diseases and disorders multiple sclerosis, Alzheimer's disease, Parkinson's disease, Huntington's disease, vascular dementia, epilepsy, migraines, stroke and trauma.

27. Use for the manufacture of a medicament of a compound of the general formula I



Formula I

or a pharmaceutically acceptable salt thereof, wherein:

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D is the residue of a nonsteroidal anti-inflammatory drug having a functional group selected from the group consisting of carboxyl, hydroxyl, amine and thiol, wherein D is attached through said functional group to a bridging group, -C(O)-Z-X- , wherein Z is a saturated or unsaturated hydrocarbon chain having from 3 to 15 carbon atoms, and X is selected from amino, hydroxy, thio and carbonyl groups, such that when the functional group of D is carboxyl, X is selected from amino, hydroxy and thio, and when the functional group of D is amino, hydroxy or thio, X is a carbonyl group.

28. A method for treatment of a disease or disorder related to an inflammatory condition comprising administering to a patient in need thereof a therapeutically effective amount of a pharmaceutical composition according to any one of claims 11 to 26.

29. The method according to claim 28, wherein said disease or disorder related to an inflammatory condition is selected from the group consisting of arthritis, rheumatoid arthritis, asthma, psoriasis, systemic lupus erythematosus, inflammatory bowel syndrome and the neurological diseases and disorders multiple sclerosis, Alzheimer's disease, Parkinson's disease, Huntington's disease, vascular dementia, epilepsy, migraines, stroke and trauma.

30. A process for the synthesis of compounds of the general formula I as defined in claim 1, comprising:

(i) providing a molecule y-X-Z-COOH, wherein y is selected from H and OH, Z is a saturated or unsaturated hydrocarbon chain having from 2 to 15 carbon atoms, and X is selected from amino, hydroxy, thio and carbonyl groups;

(ii) replacing y with an appropriate blocking group, B;

(iii) preparing an anhydride of the molecule B-X-Z-COOH;

(iv) acylating a lyso-lecithin by the anhydride of step (iii) to yield 1-acyl-2-acyl(X-B)-sn-glycero-3 phospholipid;

(v) removing the blocking group B from the functional group X; and

(vi) coupling a nonsteroidal anti-inflammatory drug D to the functional group X,

thus, generating a molecule of the general Formula I.

31. The process according to claim 30 wherein the protected functional group X is -NH.

32. The process according to claim 30 wherein the phospholipid of step (iv) is phosphatidylcholine, phosphatidylethanolamine, phosphatidylinositol or phosphatidylserine.

33. The process according to claim 30 wherein the nonsteroidal anti-inflammatory drug D is selected from the group consisting of diclofenac, indomethacin, ibuprofen, naproxen and 6-methoxy-2-naphthylacetic acid.

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